

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 (Currently Amended) A method for allowing a user to define ~~and use~~ custom metadata schemas, the method comprising the steps of:
 - (a) providing a network accessible server with a metadata library comprising a plurality of metadata ~~vocabularies~~ schemas;
 - (b) ~~displaying from the server providing form information to a client computer for presenting a form-driven user interface on a client computer that allows the user to specify, without using syntax required by an underlying specification language, a plurality of properties, including constraints supported by the underlying specification language, to thereby create~~ define a custom metadata ~~vocabulary~~ schema; and
 - (c) storing the custom metadata ~~vocabulary~~ schema in the metadata library.
- 2 (Currently Amended) The method of claim 1 further including the step of:
 - (d) allowing the user to search the metadata library to select at least one of the metadata ~~vocabularies~~ schemas to apply to an electronic resource.
- 3 (Currently Amended) The method of claim 1 wherein step (a) further includes the step of:
 - (i) providing the server with management capabilities that allows a

user to create define metadata ~~vocabularies~~ schemas, add references to the library to metadata ~~vocabularies~~ schemas existing external to the metadata library, and set user permissions for the metadata ~~vocabularies~~ schemas in the library.

4 (Currently Amended) The method of claim 3 wherein step (a) (i) further includes the step of: adding references to external metadata ~~vocabularies~~ schemas by providing a universal resource indicator and name of the metadata ~~vocabulary~~ schema.

5 (Cancelled)

6 (Cancelled)

7 (Currently Amended) The method of claim 1 wherein step (b) further includes the step of:

- (i) allowing the user to create define the custom metadata ~~vocabulary~~ schema ~~by reusing from~~ an existing metadata ~~vocabulary~~ schema.

8 (Currently Amended) The method of claim 7 wherein step (b)(i) further includes the step of:

- (1) allowing the user to search for the existing metadata ~~vocabulary~~ schema by entering search criteria that include ~~vocabulary~~ schema names and property names;
- (2) displaying metadata ~~vocabularies~~ schemas matching the search criteria;
and
- (3) allowing the user to select properties from the displayed metadata

~~vocabularies schemas~~ to add to the custom metadata vocabulary schema.

9 (Currently Amended) The method of claim 1 further including the step of:

allowing the user to supply a software validator to enforce constraints beyond those supported by an underlying specification language, wherein the software validator is called when metadata associated with the vocabulary schema is created or changed, but after constraints enforced by the specification language have been verified.

10 (Original) The method of claim 2 wherein step (d) further includes the step of:

allowing the user to upload the resource to the server.

11 (Currently Amended) The method of claim 2 wherein step (d) further includes the step of: allowing the user to specify which metadata vocabularies schemas are required to be associated with particular resource types.

12 (Currently Amended) The method of claim 11 wherein step (d) further includes the step of:

- (i) associating user account information with the resource type and required metadata vocabulary schema information; and
- (ii) automatically applying required metadata vocabularies schemas specified for the type of electronic resource when the server receives the resource by checking the user's account and retrieving the required metadata vocabularies schemas specified for the resource type.

13 (Currently Amended) The method of claim 10 wherein step (a) further includes the step of: including in the metadata vocabularies library a universal schema, shared

schemas, and private schemas.

14 (Original) The method of claim 13 wherein step (a) further includes the step of:
requiring all images in the network to include metadata that is specified by the universal
schema.

15 (Currently Amended) The method of claim 2 further including the steps of allowing
the user to assign a metadata instance to the resource by:

retrieving required metadata ~~vocabularies~~ schemas specified for a resource type
of the resource;

merging the retrieved metadata ~~vocabularies~~ schemas and removing duplicate
properties;

generating and displaying forms that allow the user to enter data values for the
properties;

validating the data values based on ~~vocabulary~~ schema constraints; and

associating the data values with the resource and saving.

16 (Currently amended) A computer-readable medium containing program instructions
for allowing a user to define ~~and use~~ custom metadata schemas, the instructions for:

(a) providing a network accessible server with a metadata library comprising a
plurality of metadata ~~vocabularies~~ schemas;

(b) ~~displaying from the server~~ providing form information to a client computer
for presenting a form-driven user interface on a client computer that allows
the user to specify, without using syntax required by an underlying

specification language, a plurality of properties, including constraints supported by the underlying specification language, to thereby create define a custom metadata vocabulary schema; and

- (c) storing the custom metadata vocabulary schema in the metadata library.

17 (Currently Amended) The ~~method~~ computer-readable medium of claim 16 further including the step of:

- (d) allowing the user to search the metadata library to select at least one of the metadata ~~vocabularies~~ schemas to apply to an electronic resource.

18 (Currently Amended) The computer-readable medium of claim 16 wherein instruction (a) further includes the instruction of:

- (i) providing the server with management capabilities that allows a user to ~~create~~ define metadata ~~vocabularies~~ schemas, add references to the library to metadata ~~vocabularies~~ schemas existing external to the vocabulary metadata library, and set user permissions for the metadata ~~vocabularies~~ schemas in the library.

19 (Currently Amended) The computer-readable medium of claim 18 wherein instruction (a) (i) further includes the instruction of: adding references to external metadata ~~vocabularies~~ schemas by providing a universal resource indicator and name of the metadata ~~vocabulary~~ schema.

20 (Cancelled)

21 (Cancelled)

22 (Currently Amended) The computer-readable medium of claim 16 wherein instruction (b) further includes the instruction of:

- (i) allowing the user to ~~create~~ define the custom metadata ~~vocabulary~~ schema ~~by reusing from~~ an existing metadata ~~vocabulary~~ schema.

23 (Currently Amended) The computer-readable medium of claim 22 wherein instruction (b)(i) further includes the instruction of:

- (1) allowing the user to search for the existing metadata ~~vocabulary~~ schema by entering search criteria that include ~~vocabulary~~ schema names and property names;
- (2) displaying metadata ~~vocabularies~~ schemas matching the search criteria; and
- (3) allowing the user to select properties from the displayed metadata ~~vocabularies~~ schemas to add to the custom metadata ~~vocabulary~~ schema.

24 (Currently Amended) The computer-readable medium of claim 17 further including the instruction of:

allowing the user to supply a software validator to enforce constraints beyond those supported by an underlying specification language, wherein the software validator is called when metadata associated with the vocabulary schema is created or changed, but after constraints enforced by the specification language have been verified.

25 (Original) The computer-readable medium of claim 17 wherein instruction (d) further includes the instruction of: allowing the user to upload the resource to the server.

26 (Currently Amended) The computer-readable medium of claim 17 wherein instruction (d) further includes the instruction of: allowing the user to specify which metadata ~~vocabularies~~ schemas are required to be associated with particular resource types.

27 (Currently Amended) The computer-readable medium of claim 26 wherein instruction (d) further includes the instruction of:

- (i) associating user account information with the resource type and required metadata ~~vocabulary~~ schema information; and
- (ii) automatically applying required metadata ~~vocabularies~~ schemas specified for the type of electronic resource when the server receives the resource by checking the user's account and retrieving the required metadata ~~vocabularies~~ schemas specified for the resource type.

28 (Currently Amended) The computer-readable medium of claim 27 wherein instruction (a) further includes the instruction of: including in the ~~vocabulary~~ metadata library a universal schema, shared schemas, and private schemas.

29 (Original) The computer-readable medium of claim 28 wherein instruction (a) further includes the instruction of: requiring all images in the network to include metadata that is specified by the universal schema.

30 (Currently Amended) The computer-readable medium of claim 17 further including the instructions of allowing the user to assign a metadata instance to the resource by:

retrieving required metadata ~~vocabularies~~ schemas specified for a resource type of the resource;

merging the retrieved metadata ~~vocabularies~~ schemas and removing duplicate properties;

generating and displaying forms that allow the user to enter data values for the properties;

validating the data values based on ~~vocabulary~~ schema constraints; and
associating the data values with the resource and saving.

31 (Currently Amended) A metadata management system, comprising:

a plurality of client computers, wherein each client computer stores respective resources; and

a server in communication with the client computers over a network, the server including;

a metadata ~~vocabulary~~ library containing a plurality of metadata ~~vocabularies~~ schemas, each metadata ~~vocabulary~~ schema comprising a plurality of properties and constraints on values the properties may have, and

a Web application for providing form information to a client computer for presenting a form-driven user interface that allows the user to specify, without using syntax required by an underlying specification language, a plurality of properties, including constraints supported by the underlying specification language, to thereby define a custom metadata schema displaying browser-based forms on the client

~~computers that allow users of the client computers to define custom metadata vocabularies for storage in the metadata vocabulary library, by entering property names.~~

32 (Currently Amended) The system of claim 31 wherein the Web application further functions to allow the user to search the metadata library to select at least one of the metadata vocabularies schemas to apply to the resources, such a wherein the user uploads one of the resources to the server, the selected metadata vocabularies schemas are applied to the resource.

33 (Currently Amended) The system of claim 31 wherein the server includes management capabilities that allows a user to ~~create~~ define metadata vocabularies schemas, add references to the library to metadata vocabularies schemas existing external to the metadata library, and set user permissions for the metadata vocabularies schemas in the library.

34 (Currently Amended) The system of claim 33 wherein the user adds references to external metadata vocabularies schemas by providing a universal resource indicator and name of the metadata vocabulary schema.

35 (Cancelled)

36 (Currently Amended) The system of claim 31 wherein Web application allows the user to ~~create~~ define the custom metadata vocabulary schema by reusing from an existing metadata vocabulary schema.

37 (Currently Amended) The system of claim 36 wherein the Web application allows the user to define the custom metadata schema from an existing metadata vocabulary

schema is re-used by:

allowing the user to search for the existing metadata ~~vocabulary~~ schema by entering search criteria that include ~~vocabulary~~ schema names and property names, displaying metadata ~~vocabularies~~ schemas matching the search criteria, and allowing the user to select properties from the displayed metadata ~~vocabularies~~ schemas to add to the custom metadata ~~vocabulary~~ schema.

38 (Currently Amended) The system of claim 32 further including a software validator running on client appears to enforce constraints beyond those supported by an underlying specification language, wherein the software validator is called when metadata associated with the ~~vocabulary~~ schema is created or changed, but after constraints enforced by the specification language have been verified.

39 (Currently Amended) The system of claim 32 wherein the user is allowed to specify which metadata ~~vocabularies~~ schemas are required to be associated with particular resource types.

40 (Currently Amended) The system of claim 39 wherein the Web application associates user account information with the resource type and required metadata ~~vocabulary~~ schema information, and to the required metadata ~~vocabularies~~ schemas specified for the type of electronic resource are automatically applied when the server receives the resource by checking the user's account and retrieving the required metadata ~~vocabularies~~ schemas specified for the resource type.

41 (Currently Amended) The system of claim 40 wherein the metadata ~~vocabulary~~

library includes a universal schema, shared schemas, and private schemas.

42 (Original) The system of claim 41 wherein requiring all resources stored on the server are required to include metadata that is specified by the universal schema.

43 (Currently Amended) The system of claim 32 wherein the user is allowed to assign a metadata instance to the resource by:

retrieving required metadata vocabularies schemas specified for a resource type of the resource;

merging the retrieved metadata vocabularies schemas and removing duplicate properties;

generating and displaying forms that allow the user to enter data values for the properties;

validating the data values based on vocabulary schema constraints; and

associating the validated data values with the resource and saving.